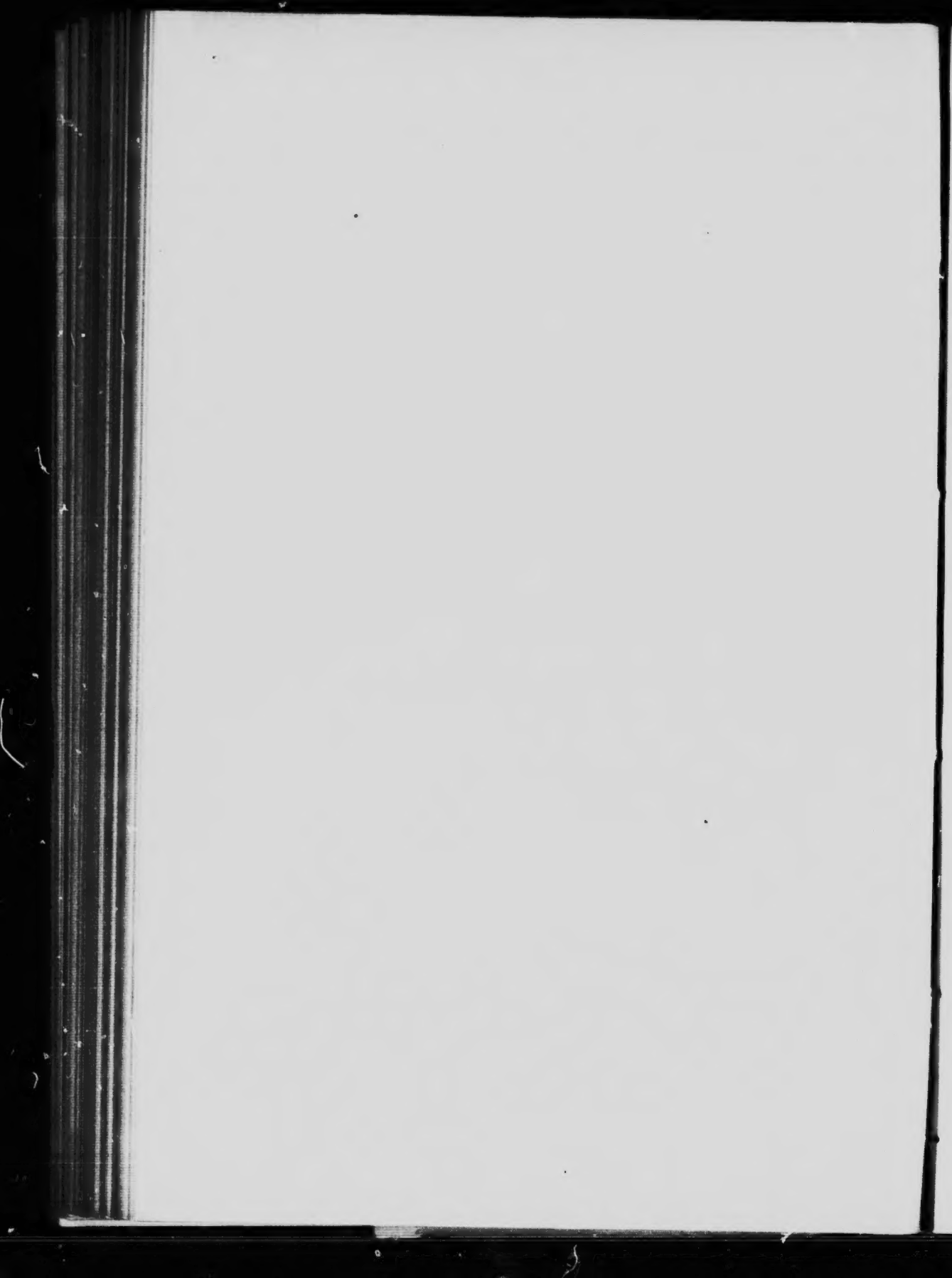




DEPARTMENT OF AGRICULTURE

CENTRAL EXPERIMENTAL FARM
OTTAWA, CANADA

RESULTS OBTAINED IN 1906

FROM

TRIAL PLOTS OF

GRAIN, FODDER CORN, FIELD ROOTS

AND

POTATOES

BY

WILLIAM SAUNDERS, C.M.G., LL.D.
Director of Experimental Farms

AND

CHAS. E. SAUNDERS, Ph. D.
Cerealist.

BULLETIN No. 55

NOVEMBER, 1906.

PUBLISHED BY DIRECTION OF THE HON. SYDNEY A. FISHER,
MINISTER OF AGRICULTURE

TABLE OF CONTENTS

	PAGE.
Results of Experiments with Spring Wheat.....	6
" " " Durum or Macaroni Wheat.....	8
" " " Emmer and Spelt.....	10
" " " Oats.....	12
" " " Six-rowed Barley.....	15
" " " Two-rowed Barley.....	17
" " " Pease.....	19
" " " Indian Corn.....	21
" " " Turnips.....	24
" " " Mangels.....	26
" " " Carrots.....	28
" " " Sugar Beets.....	30
" " " Potatoes.....	32
Summary.....	35

To the Honourable

The Minister of Agriculture

SIR,—I beg to submit herewith, for your approval Bulletin No. 55 of the Experimental Farm series, which has been prepared by the Cerealist, Dr. C. E. Saunders and myself. There are presented in this publication the results of a large number of experiments, which have been conducted at all the experimental farms in your Department during the season of 1906, with spring wheat, durum or macaroni wheat, emmer and spelt, oats, barley, pease, Indian corn, turnips, mangels, carrots, sugar beets and potatoes, in plots of uniform size, and with the crops grown under fairly uniform conditions. The average results are also given of the tests for the past five years of those varieties which have been long under trial.

These test plots are conducted with the object of gaining information as to the relative productiveness of the different sorts and their earliness in ripening. The returns show much variation in the weight of the crops grown and point to the importance of care in the choice of varieties of seed for sowing. It is hoped that these results giving the experience gained under some of the more important climatic variations found in the country, will prove useful to farmers in every part of Canada.

I have the honour to be,

Your obedient servant,

WM. SAUNDERS,

Director of Experimental Farms.

OTTAWA, November 16th 1906. .

RESULTS OBTAINED

FROM TRIAL PLOTS OF

GRAIN, FODDER CORN, FIELD ROOTS AND POTATOES

BY WILLIAM SAUNDERS, C.M.G., LL.D., F.R.S.C., F.L.S., &c.

Director of Experimental Farms

AND CHAS. E. SAUNDERS, B.A., Ph.D., *Cerealist.*

During the past twelve years experiments have been conducted on uniform trial plots at each of the Dominion Experimental Farms for the purpose of gaining information as to the most productive and earliest ripening varieties of grain, fodder corn, field roots and potatoes. In arranging for these plots the same varieties have been sown at each of the farms, the seed being supplied at the outset from a common stock. In each case the seed has been sown early, and, as a rule, all the different sorts of the same crop have been sown on the same day or at most within two or three days so as to give to all an even start. The land chosen each year for these plots has been as nearly uniform in character as could be found and before sowing has been brought into a good condition of tilth. In this bulletin which is the twelfth of the series, the results of the experiments are presented in the same form as that of last year, giving special prominence to the average yield of each variety for the past five years, as being the more trustworthy basis from which to draw conclusions, and relegating the figures obtained in the current year to a subordinate place.

The varieties are therefore placed in the tables in the order of their average yield for the last five years. Those which have only been grown for shorter periods are placed in a separate group. While a five-year period is undoubtedly rather short, it seems undesirable to lengthen it, since by so doing all recently introduced varieties would be kept too long from taking their place in the tables with the older sorts.

The averages of the returns from all the experimental farms, which in past issues of this bulletin have been published in special tables, are omitted this year. It has been thought unnecessary to continue the publication of them since they have been published for so many years and are of value rather from a statistical than a purely agricultural point of view.

At the Central Experimental Farm at Ottawa, nearly all sorts of cereals have yielded well during 1906, especially those which mature early. Owing to the unusually dry weather in midsummer some of the later ripening sorts gave less than an average yield. The crops of pease have been below the average. Indian corn has given good

returns in the fields but it has fallen off considerably in the plots owing to unsuitability in the soil for a hot dry season. Turnips have given about half the usual yield, while other field roots have given almost average crops. Dry weather reduced the potato crop to less than half of an average yield and the tubers are small.

At Nappan, the spring season was unfavourable, and owing to the ground being cold and wet, seeding was much delayed. The very hot weather which prevailed later in the year was favourable for Indian corn, but hurried the ripening of the grain so that the crops have been below the average. The root crops also in consequence of protracted dry weather in the autumn have been much lighter than usual.

At Brandon the harvest returns have been very gratifying, and wheat, oats and barley have all given excellent crops. Pease have done unusually well, and the yields of Indian corn, field roots and potatoes have all been good.

At Indian Head the crops of wheat and barley have been very good, while oats have given phenomenal yields, the 37 varieties under trial in the test plots having averaged over 105 bushels per acre; potatoes have given a medium return, while pease, Indian corn and field roots have given crops below the average. Field roots at Indian Head suffered much from the attacks of cut-worms, the carrots were entirely destroyed by them, and the other field roots had their first and second sowings so injured that a third sowing was necessary, but this was too late in the season to permit of the maturing of an average crop.

At Agassiz the wheat suffered again from the depredations of the midge, *Diplosis tritici*, which very much reduced the crop. Oats and barley have given very fair returns, so also has Indian corn. Carrots gave a very heavy yield, but the crops of other field roots were light.

The following lists include only those varieties which are being grown on all the Dominion Experimental Farms.

In computing the averages for these tables the same five years have been used in each case, except in a few instances where the omission or failure of one of the plots made a blank in the records for that year. The instances are marked with a cross † and the true position in the tables of the varieties so marked is on this account to be regarded as somewhat uncertain.

Cross-bred varieties produced on the experimental farms are marked with an asterisk.

SPRING WHEAT.

Sixteen varieties of spring wheat (exclusive of the durum or macaroni wheats) have been grown on the uniform test plots at all the Dominion Experimental Farms during the past season. The size of the plots was one-fortieth of an acre at Ottawa, Ont., Nappan, N.S., and Agassiz, B.C.; while at Brandon, Man., and Indian Head, Sask., the plots were each one-twentieth of an acre. The seed was sown at the rate of one and one-half bushels per acre. The dates of sowing were as follows: At Ottawa, May 1st and 2nd; at Nappan, May 17th and 18th; Brandon, April 23rd and 24th, and at Indian Head, April 11th.

The yield is expressed in bushels per acre, the bushel of wheat being 60 pounds.

SPRING WHEAT.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Preston *	33 20	104	38 ..	12	White Fife.....	27 20	111	25 40
2	Bishop *	31 52	103	41 40	13	Stanley *	25 16	106	29 ..
3	Pringle's Champlain..	31 48	106	33 40	14	Haynes' Blue Stem— (Minn. 160).....	25 8	112	25 ..
4	Herrison Bearded....	30 32	108	32 40		(For less than 5 years).			
5	Huron *	30 10	109	36 20		Hungarian White (2 years).....	33 20	102	37 40
6	Colorado.....	29 52	105	40 ..		Riga * (1 year).....			32 20
7	Laurel *	29 36	100	32 20					
8	White Russian.....	29 32	112	29 40					
9	Red Fern.....	29 ..	108	24 40					
10	Red Fife.....	28 28	111	29 40					
11	Percy *	28 ..	165	33 40					

The average crop of the sixteen varieties of spring wheat tested on the Central Experimental Farm at Ottawa in 1906 was 32 bushels 38 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Red Fife.....	34 16	112	33 20	11	Haynes' Blue Stem...	27 40	115	27 ..
2	White Fife.....	33 48	114	32 ..	12	Percy *.....	27 12	113	27 40
3	Preston *	32 40	111	28 ..	13	Herrison Bearded ...	27 4	112	28 ..
4	Colorado.....	32 ..	110	30 40		(For less than 5 years).			
5	Laurel *	31 40	115	26 40		Bishop * (2 years)....	32 20	104	32 40
6	White Russian.....	31 12	106	31 20		Hungarian White (2 years).....	28 40	103	28 20
7	Pringle's Champlain..	30 52	110	27 20		Riga * (1 year).....			27 ..
8	Stanley *.....	30 4	113	30 ..					
9	Red Fern.....	29 36	112	34 ..					
10	Huron *	29 16	111	27 20					

The average crop of the sixteen varieties of spring wheat tested on the Experimental Farm at Nappan, in 1906 was 29 bushels 27 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Preston *	35 32	112	44 ..	11	Haynes' Blue Stem ..	31 24	120	36 ..
2	Red Fife.....	35 28	112	40 ..	12	Red Fern.....	29 18	121	32 ..
3	White Fife.....	35 22	125	35 10	13	Colorado.....	28 32	121	34 20
4	Huron *	35 6	121	43 50		(For less than 5 years).			
5	Pringle's Champlain..	32 48	120	41 50		Bishop * (2 years)....	38 35	119	35 10
6	Percy *	32 36	120	34 50		Hungarian White (2 years).....	36 45	125	35 10
7	Stanley *.....	32 30	121	35 10		Riga *.....			34 50
8	White Russian.....	32 12	124	31 20					
9	Herrison Bearded....	32 2	121	34 30					
10	Laurel *	31 28	124	25 40					

The average crop of the sixteen varieties of spring wheat tested on the Experimental Farm at Brandon in 1906 was 35 bushels 52 lbs. per acre.

SPRING WHEAT—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Preston *	43 2	130	46 ..	11	Pringle's Champlain..	36 29	132	39 ..
2	Stanley *	41 59	130	45 20	12	Haynes' Blue Stem...	35 31	134	39 20
3	White Russian.....	41 40	128	41 ..	13	Herisson Bearded....	35 27	135	42 20
4	Percy *	40 55	130	41 20		(For less than 5 years).			
5	White Fife.....	40 17	136	42 20		Bishop * (2 years)....	43 30	130	44 ..
6	Huron *	40 13	128	43 40		Hungarian White (2 years).....	29 ..	131	41 20
7	Red Fife.....	38 27	136	43 40		Riga * (1 year).....	.. ..	.. ..	35 20
8	Laurel *.....	38 10	137	42 ..					
9	Red Fern.....	38 7	132	42 ..					
10	Colorado.....	36 34	131	39 40					

The average crop of the sixteen varieties of spring wheat tested on the Experimental Farm at Indian Head in 1906 was 42 bushels 11 lbs. per acre.

The spring wheat plots also the plots of durum wheat and of emmer and spelt at the Experimental Farm at Agassiz have again been so much injured by the wheat midge, *Diplosis tritici*, as to make the tests for 1906 as to the relative productiveness of the varieties of no value. Under the circumstances it is thought best to give here the average yields on the plots for the five years ending 1905.

EXPERIMENTAL FARM, AGASSIZ, B. C.

Number.	Varieties Tested.	Average Yield.	Number.	Varieties Tested.	Average Yield.
	(For five years ending 1905.)	Bu. Lbs.		(For five years ending 1905.)	Bu. Lbs.
1	Stanley*.....	35 14	8	Percy*.....	31 53
2	Colorado.....	34 14	9	Haynes' Blue Stem.....	31 12
3	Laurel*.....	33 46	10	Red Fern.....	30 27
4	White Russian.....	33 27	11	Huron*.....	30 26
5	Red Fife.....	33 9	12	Herisson Bearded.....	30 17
6	White Fife.....	32 47	13	Pringle's Champlain.....	28 52
7	Preston*.....	32 39			

DURUM OR MACARONI WHEAT.

The results of the tests of varieties of durum wheat are published in a separate table, as these wheats possess qualities rather different from those of the ordinary sorts of spring wheat. While it is possible to make good flour from some kinds of durum wheat, such flour is generally unpopular. Furthermore the peculiar character of the kernels necessitates the use of somewhat different methods in the milling of these kinds of wheat. They are naturally, therefore, looked upon with disfavour by millers.

Farmers who grow any of these varieties should exercise great care to prevent them from becoming mixed with the standard sorts used for flour making.

DURUM OR MACARONI WHEAT—Continued.

Four varieties of durum wheat have been grown on the uniform test plots during the past season. The plots were of the same size as those sown with ordinary spring wheat and the seed was used at the rate of about one and three quarter bushels per acre. The dates of sowing were as follows: At Ottawa, Ont., April 27th; Nappan, N.S., May 18th; Brandon, Man., April 24th, and at Indian Head, Sask., April 11th.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.	(For less than 5 years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Roumanian.....	38 8	111	41 ..	Yellow Gharnovka(3yrs)	33 20	105	31 40
2	Goose.....	28 ..	109	39 ..	Mahmoudi (3 yrs).....	21 40	108	18 40

The average crop of the four varieties of durum wheat tested on the Central Experimental Farm at Ottawa in 1906 was 32 bushels 35 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N. S.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.	(For less than 5 years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Roumanian.....	25 23	113	22 ..	Yellow Gharnovka(3yrs)	17 7	105	20 40
2	Goose.....	24 40	112	22 40	Mahmoudi (3 yrs).....	13 33	105	18 40

The average crop of the four varieties of durum wheat tested on the Experimental Farm at Nappan, in 1906, was 21 bushels per acre.

EXPERIMENTAL FARM BRANDON, MAN.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.	(For less than 5 years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Goose	49 56	127	56 20	Yellow Gharnovka(3 yrs)	51 20	127	53 ..
2	Roumanian.....	43 8	126	54 20	Mahmoudi (3 yrs).....	45 20	129	46 20

The average crop of the four varieties of durum wheat tested on the Experimental Farm at Brandon in 1906, was 53 bushels per acre.

DURUM OR MACARONI WHEAT—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.	(For less than 5 years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Goose.....	47 27	134	51 40	Yellow Gharnovka(3yrs)	48 48	135	52 40
2	Roumanian.....	46 2	136	47 40	Mahmoudi (3 yrs.).....	47 57	135	49 ..

The average crop of the four varieties of durum wheat tested on the Experimental Farm at Indian Head in 1906, was 50 bushels 15 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B. C.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Varieties Tested.	Average Yield.	Average days maturing.
	(For 5 years ending 1905.)	Bu. Lbs.	Days.	(For 2 years ending 1905.)	Bu. Lbs.	Days.
1	Roumanian.....	33 36	120	Mahmoudi.....	19 20	117
2	Goose.....	32 50	115	Yellow Gharnovka	18 ..	117

EMMER AND SPELT.

Two varieties of emmer and two of spelt were sown in the uniform test plots this season. They are arranged in the tables in the order of their yield for three years.

The plots were of the same size as those of spring wheat. The dates of sowing were as follows:—At Ottawa, Ont., April 28th; Nappan, N.S., May 18th; Brandon, Man., April 24th, and at Indian Head, Sask., April 17th.

The yield is expressed in pounds per acre, the grain being, of course, weighed with the husk adhering

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For three years.)	Lbs.	Days.	Lbs.		(For three years.)	Lbs.	Days.	Lbs.
1	Red Emmer	2,440	107	2,680	3	Red Spelt.	1,987	111	2,100
2	Common Emmer.....	2,273	101	2,720	4	White Spelt	1,960	108	1,740

The average crop of the four varieties of emmer and spelt tested on the Central Experimental Farm at Ottawa in 1906, was 2,310 lbs. per acre.

EMMER AND SPELT—Continued.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For three years.)	Lbs.	Days.	Lbs.		(For three years.)	Lbs.	Days.	Lbs.
1	White Spelt.....	2,000	111	2,520	3	Common Emmer.....	1,227	104	1,760
2	Red Spelt.....	1,907	111	1,890	4	Red Emmer.....	1,020	110	1,040

The average crop of the four varieties of emmer and spelt tested on the Experimental Farm at Nappan in 1906, was 1,800 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For three years.)	Lbs.	Days.	Lbs.		(For three years.)	Lbs.	Days.	Lbs.
1	Common Emmer.....	3,600	126	3,820	3	Red Emmer.....	2,760	132	3,000
2	Red Spelt.....	2,893	129	3,180	4	White Spelt.....	2,087	130	2,740

The average crop of the four varieties of emmer and spelt tested on the Experimental Farm at Brandon in 1906, was 3,185 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For three years.)	Lbs.	Days.	Lbs.		(For three years.)	Lbs.	Days.	Lbs.
1	Common Emmer.....	3,087	128	3,220	3	White Spelt.....	2,540	131	3,160
2	Red Spelt.....	2,913	130	3,600	4	Red Emmer.....	2,513	131	2,980

The average crop of the four varieties of emmer and spelt tested on the Experimental Farm at Indian Head in 1906, was 3,240 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Average days maturing.	Number.	Varieties tested.	Average yield.	Average days maturing.
	(For two years ending 1905.)	Lbs.	Days.		(For two years ending 1905.)	Lbs.	Days.
1	Common Emmer.....	1,890	117	3	Red Emmer.....	1,660	117
2	White Spelt.....	1,775	117	4	Red Spelt.....	1,595	117

OATS.

During the season of 1906, thirty-seven varieties of oats have been under trial. The size of the plots on which they were grown was the same as in the case of spring wheat. The seed was generally sown at the rate of two bushels per acre, and the dates of sowing were as follows:—At Ottawa, Ont., May 4th; Nappau, N.S., May 18th; Brandon, Man., May 9th and 10th; Indian Head, Sask., April 23rd, and at Agassiz, B.C., on April 12th.

The yield is expressed in bushels per acre, the bushel of oats being 34 pounds.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bus. lbs.	Days.	Bus. lbs.		(For five years.)	Bus. lbs.	Days.	Bus. lbs.
1	Twentieth Century...	75 26	104	68 8	21	Kendal Black*	64 8	107	58 28
2	Banner	74 28	105	68 8	22	Bavariant	64 6	107	64 4
3	White Giant	74 8	105	64 4	23	Golden Giant	63 30	110	52 12
4	Lincoln	73 22	105	68 8	24	Black Beauty	62 32	105	60 20
5	Mennonite	72 8		66 16	25	Buckbee's Illinois	62 24	105	57 2
6	Golden Beauty	72 4		68 28	26	Kendal White*	62 12	105	60 20
7	Virginia White	71 14	1	50 ..	27	Pioneer	62 4	104	57 2
8	Wide Awake	71 2	104	64 4	28	Goldfinder	61 30	106	58 8
9	Holstein Prolific		106	72 12	29	Improved Ligowo	61 30	104	63 18
10	Columbus	69 4	105	64 24	30	Siberian	61 22	106	61 6
11	American Triumph	67 30	106	54 24	31	Joanette	60 8	108	70 20
12	Improved American	67 30	106	55 30	32	Milford Black*	58 16	106	48 28
13	Irish Victor	67 22	106	70 20	33	Olive Black*	58 16	106	54 4
14	Sensation	67 6	105	54 24	34	Tartar King	58 16	102	62 32
15	Abundance	66 24	104	51 6	35	Waverley	56 4	106	54 4
16	Thousand Dollar	66 8	104	74 4		(For less than 5 years.)			
17	Danish Island	66	105	61 26		Golden Fleece† (1 yrs)	64 3	104	60 20
18	Milford White*	65 30	105	56 16		Storm King (3 yrs.) ..	56 16	99	27 2
19	American Beauty	65 18	102	67 22					
20	Swedish Select†	64 16	106	58 8					

The average crop of the thirty-seven varieties of oats tested on the Central Experimental Farm at Ottawa in 1906, was 60 bushels, 11 lbs. per acre.

OATS—Continued.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bus. lbs.	Days.	Bus. lbs.		(For five years.)	Bus. lbs.	Days.	Bus. lbs.
1	Siberian.....	81 8	109	55 20	21	American Beauty...	68 16	109	50 20
2	Improved Ligowo....	77 14	106	50 20	22	Abundance.....	67 22	106	38 8
3	Goldfinder.....	76 32	111	63 18	23	Columbus.....	66 16	109	43 18
4	Lincoln.....	76 8	108	52 12	24	Wide Awake.....	66 12	107	40 ..
5	Thousand Dollar....	75 26	106	48 28	25	Tartar King.....	65 6	105	58 16
6	Twentieth Century...	75 20	105	43 18	26	Buckbee's Illinois...	63 10	109	41 6
7	Sensation.....	74 24	106	37 22	27	Irish Victor.....	60 8	106	40 ..
8	Banner.....	74 ..	105	44 24	28	American Triumph..	60 6	113	45 30
9	Pioneer.....	73 22	104	50 20		(For less than 5 years.)			
10	Joanette.....	73 10	105	45 10		Swedish Select, 4 yrs.	70 30	103	49 14
11	Bavarian.....	73 2	107	50 ..		Golden Fleece, 4 yrs.	67 27	105	55 10
12	White Giant.....	72 28	108	42 12		Olive Black*, 4 yrs.	62 27	105	44 24
13	Mennonite.....	72 12	108	40 20		Kendal White*, 4 yrs.	60 27	105	48 8
14	Holstein Prolific....	71 10	107	49 14		Kendal Black*, 4 yrs.	59 24	105	55 10
15	Danish Island.....	71 2	109	44 24		Milford Black*, 4 yrs.	59 8	104	54 26
16	Golden Giant.....	70 24	113	51 20		Milford White*, 4 yrs.	53 33	104	49 14
17	Golden Beauty.....	69 10	107	57 2		Storm King, 3 yrs.	50 13	100	42 32
18	Improved American...	69 10	108	46 16		Virginia White, 1 yr	.. ..	.....	48 8
19	Waverley.....	68 28	107	38 28					
20	Black Beauty.....	68 28	103	40 20					

The average crop of the thirty-seven varieties of oats tested on the Experimental Farm at Nappan in 1906, was 47 bushels, 18 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Improved American...	107 22	108	110 20	21	Mennonite.....	97 18	105	110 20
2	Buckbee's Illinois...	107 ..	110	99 24	22	Irish Victor.....	97 8	110	91 26
3	Golden Giant.....	106 9	114	99 14	23	Tartar King.....	94 16	106	110 ..
4	Abundance.....	105 30	109	96 6	24	Black Beauty.....	93 22	107	92 22
5	Siberian.....	105 14	110	99 24	25	Joanette.....	91 24	110	85 20
6	Banner.....	104 6	110	114 4	26	Pioneer.....	89 14	108	87 22
7	Wide Awake.....	103 30	110	97 22	27	Sensation.....	88 18	108	103 8
8	Danish Island.....	103 14	110	105 10	28	Improved Ligowo....	83 20	108	105 10
9	Goldfinder.....	103 5	113	97 2		(For less than 5 years.)			
10	Twentieth Century...	102 19	111	102 32		Golden Fleece (4 yrs.)	107 21	109	98 23
11	Golden Beauty.....	101 26	110	96 16		Kendal White* (4 yrs.)	102 2	111	100 20
12	Lincoln.....	101 24	109	97 32		Olive Black* (4 yrs.)	95 15	114	92 12
13	American Triumph...	101 22	111	100 ..		Kendal Black* (4 yrs.)	90 20	114	82 12
14	Waverley.....	101 1	109	94 4		Milford Black* (4 yrs.)	88 8	113	79 24
15	American Beauty.....	100 32	108	116 16		Milford White* (4 yrs.)	86 3	113	70 30
16	White Giant.....	100 18	108	110 ..		Swedish Select (4 yr.)	81 16	108	72 32
17	Holstein Prolific....	100 ..	108	96 6		Storm King (3 yrs.)	95 10	110	99 14
18	Columbus.....	99 26	109	107 2		Virginia White (1 yr.)	.. ..	.....	87 32
19	Thousand Dollar....	99 18	109	105 20					
20	Bavarian.....	99 2	109	104 14					

The average crop of the 37 varieties of oats tested on the Experimental Farm at Brandon in 1906 was 57 bushels 31 lbs. per acre.

OATS—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Banner	114 19	116	128 23	21	Thousand Dollar.....	94 3	113	112 12
2	Goldfinder.....	105 10	119	119 14	22	American Beauty.....	94 1	116	98 28
3	Golden Beauty.....	104 1	116	114 4	23	Tartar King.....	93 11	115	103 13
4	Twentieth Century.....	103 18	117	103 18	24	Pioneer.....	92 18	116	100 ..
5	Golden Giant.....	103 16	121	112 12	25	Siberian.....	91 17	120	97 2
6	Irish Victor.....	102 12	117	112 12	26	Sensation.....	91 13	115	109 14
7	Danish Island.....	102 6	114	102 32	27	Buckbee's Illinois.....	91 1	113	87 2
8	Columbus.....	101 29	118	111 28	28	Black Beauty.....	86 28	116	94 24
9	Bavarian.....	101 23	116	124 4		(For less than 5 years).			
10	Holstein Prolific.....	100 9	115	111 6		Kendal White* (4 yrs.)	110 15	120	107 2
11	Improved American.....	100 7	116	111 26		Golden Fleece (4 yrs.)	105 1	122	115 30
12	White Giant.....	99 5	113	117 2		Milford White* (4 yrs.)	104 19	120	105 30
13	American Triumph.....	99 2	117	108 8		Kendal Black* (4 yrs.)	101 18	122	115 10
14	Waverley.....	97 29	117	102 12		Olive Black* (4 yrs.)	99 13	120	93 18
15	Improved Ligowo.....	97 27	115	122 32		Swedish Select (4 yrs.)	99 11	116	95 10
16	Abundance.....	97 6	114	92 32		Milford Black* (4 yrs.)	97 4	122	87 22
17	Wide Awake.....	96 27	114	94 24		Storm King... (3 yrs.)	94 18	117	90 20
18	Mennonite.....	95 20	114	114 24		Virginia White (1 yr.)	..	.....	87 22
19	Lincoln.....	95 16	116	102 32					
20	Joanette.....	94 8	120	107 22					

The average crop of the 37 varieties of oats tested on the Experimental Farm at Indian Head in 1906 was 105 bushels 29 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Abundance.....	69 12	115	58 18	21	American Beauty.....	59 28	116	70 20
2	Tartar King.....	68 29	112	54 24	22	American Triumph.....	59 16	114	52 32
3	Siberian.....	68 18	115	61 26	23	Thousand Dollar.....	59 16	116	60 20
4	Waverley.....	67 30	116	60 ..	24	Buckbee's Illinois.....	58 32	115	64 24
5	Bavarian.....	66 30	116	68 8	25	Mennonite.....	57 13	113	45 30
6	Black Beauty.....	66 6	112	71 16	26	Wide Awake.....	55 8	116	51 26
7	Goldfinder.....	65 22	116	71 26	27	Twentieth Century.....	53 32	114	48 28
8	Danish Island.....	65 14	117	58 28	28	Golden Beauty.....	53 21	115	43 18
9	Lincoln.....	64 32	115	72 12		(For less than 5 years).			
10	White Giant.....	64 8	116	65 30		Golden Fleece (4 yrs.)	74 9	115	65 30
11	Improved Ligowo.....	63 24	115	62 12		Milford White* (4 yrs.)	68 10	114	62 22
12	Improved American.....	63 8	115	62 12		Kendal White* (4 yrs.)	67 12	117	56 16
13	Banner.....	62 26	115	58 28		Olive Black* (4 yrs.)	64 1	114	72 32
14	Columbus.....	62 8	116	50 30		Kendal Black* (4 yrs.)	59 16	115	57 22
15	Irish Victor.....	62 7	115	59 14		Swedish Select (4 yrs.)	59 5	113	63 18
16	Pioneer.....	62 4	112	61 16		Milford Black* (4 yrs.)	56 8	113	59 24
17	Sensation.....	62 4	114	50 20		Storm King (3 yrs.)	56 16	111	47 2
18	Holstein Prolific.....	62 1	114	60 6		Virginia White (1 yr.)	.....	.....	71 26
19	Joanette.....	61 20	114	57 22					
20	Golden Giant.....	60 14	118	63 18					

The average crop of the 37 varieties of oats tested on the Experimental Farm at Agassiz in 1906 was 60 bushels 7 lbs. per acre.

SIX-ROWED BARLEY.

During the season of 1906, eighteen varieties of six-rowed barley have been under test. The plots were of the same size as those of spring wheat. The seed was used in the proportion of two bushels to the acre; and the dates of sowing were as follows: At Ottawa, Ont., April 28th; Nappan, N.S., May 19th; Brandon, Man., May 28th; Indian Head, Sask., May 1st and at Agassiz, B.C., April 16th.

The yield is expressed in bushels per acre, the bushel of barley being 48 lbs.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Nugent*	58 4	96	65 ..	10	Common ..	51 32	93	53 36
2	Mensury ..	56 36	94	67 4	11	Brome*	51 8	97	42 24
3	Trooper*	56 32	92	69 8	12	Argyle*	49 28	96	62 4
4	Blue Long Head ..	55 44	96	61 32	13	Oderbruch ..	48 28	96	42 24
5	Albert*	55 36	96	77 4	14	Empire*	47 28	96	62 24
6	Stella*	55 28	95	47 4	15	Claude*	46 4	97	51 12
7	Yale*	54 16	95	58 16	16	Royal*	43 40	96	41 32
8	Odessa*	53 44	94	Failed.	17	Mansfield*	40 36	98	57 44
9	Summit*	52 8	93	51 32	18	Champion ..	36 12	93	32 24

The average crop of the 18 varieties of six-rowed barley tested on the Central Experimental Farm in 1906, was 53 bushels 25 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N. S.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
(For five years.)					(For five years.)				
	Bu. Lbs.	Days.	Bu. Lbs.			Bu. Lbs.	Days.	Bu. Lbs.	
1	Common	52 ..	93	42 24	12	Argyle*	43 36	94	38 36
2	Mensury	50 8	96	43 16	13	Nugent*	43 28	97	27 44
3	Royal*	48 40	95	38 16	14	Summit*	43 20	99	36 32
4	Empire*	48 32	96	35 40	15	Mansfield*	43 12	96	35 20
5	Oderbruch	48 20	93	42 44	16	Claude*	41 36	94	38 16
6	Stella*	48 16	99	34 8	17	Champion	39 24	92	25 40
7	Trooper*	47 20	94	33 16	(For less than 5 years.)				
8	Albert*	47 ..	94	39 8	Blue Long head (2 yrs.)				
9	Odessa	46 20	93	45 ..	40	..	94	40	..
10	Brome*	45 29	97	30 20					
11	Yale*	43 40	97	32 24					

The average crop of the 18 varieties of six-rowed barley tested on the Experimental Farm at Nappan in 1906, was 36 bushels 33 lbs. per acre.

SIX-ROWED BARLEY—Continued.
EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.	Number.	Varieties Tested.	Average Yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Mensury	60 36	91	61 12	12	Oderbruch	49 32	89	47 44
2	Yale	60 34	90	60 10	13	Trooper	49 6	93	55 10
3	Mansfield	58 16	91	47 44	14	Common	48 28	88	49 8
4	Odessa	55 41	89	60 40	15	Stella	48 16	92	48 46
5	Nugent	55 44	92	65 40	16	Royal	46 12	90	59 20
6	Argyle	54 26	91	51 22	17	Champion	36 18	86	53 46
7	Summit	54 24	93	50 10		(For less than 5 years.)			
8	Albert	54 14	88	55 46		Blue Long Head (2 yrs.)	64 43	93	66 42
9	Brome	53 28	92	44 28					
10	Empire	53 10	92	56 22					
11	Claude	53 8	92	57 24					

The average crop of the 18 varieties of six-rowed barley tested on the Experimental Farm at Brandon in 1906, was 54 bushels 34 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Odessa	65 16	101	63 40	11	Royal	57 40	100	50 40
2	Claude	63 44	103	46 12	12	Trooper	57 7	100	53 36
3	Nugent	60 40	106	49 28	13	Brome	55 43	104	44 28
4	Common	60 12	99	60 40	14	Oderbruch	55 37	99	55 ..
5	Mansfield	60 9	101	52 44	15	Argyle	55 16	101	47 44
6	Stella	59 39	104	47 44	16	Albert	49 42	101	42 24
7	Summit	59 4	103	48 36	17	Champion	40 11	97	41 32
8	Mensury	59 2	101	57 24		(For less than 5 years.)			
9	Empire	58 40	103	55 ..		Blue Long Head (2 yrs.)	68 46	102	64 8
10	Yale	58 18	103	52 4					

The average crop of the 18 varieties of six-rowed barley tested on the Experimental Farm at Indian Head in 1906 was 52 bushels 3 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Mensury	56 38	104	49 28	11	Mansfield	48 2	106	32 24
2	Oderbruch	53 2	103	35 ..	12	Summit	47 36	108	33 16
3	Brome	51 8	105	36 12	13	Common	47 28	103	36 32
4	Empire	50 30	106	46 32	14	Champion	46 44	100	35 40
5	Stella	50 8	108	37 24	15	Yale	46 24	107	39 8
6	Claude	50 1	103	42 24	16	Royal	46 14	104	51 82
7	Albert	49 44	104	34 8	17	Trooper	45 4	109	39 8
8	Odessa	49 42	101	47 4		(For less than 5 years.)			
9	Nugent	49 26	107	39 18		Blue Long Head (2 yrs.)	46 27	102	43 16
10	Argyle	49 6	105	36 22					

The average crop of the 18 varieties of six-rowed barley tested on the Experimental Farm at Agassiz in 1906 was 38 bushels 35 lbs. per acre.

TWO-ROWED BARLEY.

Fourteen varieties of two-rowed barley were tested during the season of 1906, on all the Experimental Farms. The plots were of the same size as those of spring wheat. The seed was used at the rate of two bushels per acre; and the dates of sowing were as follows: At Ottawa, Ont., April 30th and May 1st; Nappan, N.S., May 19th; Brandon, Man., May 28th; Indian Head, Sask., May 1st and at Agassiz, B.C., April 16th. The yield is expressed in bushels per acre, the bushel of barley being 48 lbs.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	French Chevalier	55 ..	99	57 44	10	Harvey*	43 16	99	48 36
2	Canadian Thorpe	50 20	100	56 12	11	Sidney*	42 16	98	52 44
3	Danish Chevalier	50 ..	99	52 44	12	Logan*	40 40	100	42 44
4	Standwell	49 36	100	67 44	13	Dunham*	40 8	101	53 36
5	Invincible	47 16	100	62 24		(For less than 5 years.)			
6	Gordon*	47 ..	98	56 32		Swedish Chevalier (3 years)	51 25	93	50 12
7	Beaver*	46 16	96	57 24					
8	Jarvis*	46 4	97	57 4					
9	Clifford*	44 36	98	54 28					

The average crop of the 14 varieties of two-rowed barley tested on the Central Experimental Farm in 1906, was 55 bushels, 27 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years.)	Bu. Lbs.	Days.	Bu. Lbs.
1	Danish Chevalier	55 23	98	51 32	10	Standwell	37 12	99	33 36
2	French Chevalier	48 44	97	46 32	11	Sidney*	37 8	97	29 8
3	Beaver*	45 40	97	39 8	12	Gordon*	35 44	97	34 28
4	Logan*	40 32	98	35 ..	13	Jarvis*	34 44	97	36 12
5	Invincible	40 2	98	38 16		(For less than 5 years.)			
6	Clifford*	39 42	97	44 8		Swedish Chevalier (2 years)	37 34	97	50 ..
7	Dunham*	39 28	97	30 ..					
8	Harvey*	38 40	97	32 24					
9	Canadian Thorpe	38 24	98	25 40					

The average crop of the 14 varieties of two-rowed barley tested on the Experimental Farm at Nappan in 1906 was 37 bushels, 31 lbs. per acre.

TWO-ROWED BARLEY—Continued.
EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
(For five years.)					(For five years.)				
		Bu. Lbs.	Days.	Bu. Lbs.			Bu. Lbs.	Days.	Bu. Lbs.
1	Gordon*	52 46	93	50 18	10	French Chevalier	43 24	95	61 2
2	Jarvis*	52 44	91	60 22	11	Canadian Thorpe	43 ..	93	51 2
3	Harvey*	50 2	91	53 26	12	Danish Chevalier	42 24	96	51 42
4	Clifford*	48 44	92	60 30	13	Beaver*	41 14	94	48 26
5	Dunham*	48 24	92	49 38	(For less than 5 years.)				
6	Standwell	46 28	95	47 14	Swedish Chevalier, (2 years)				
7	Invincible	45 42	93	50 10			54 38	94	55 40
8	Logan*	45 12	93	47 34					
9	Sidney*	43 40	90	49 38					

The average crop of the 14 varieties of two-rowed barley tested on the Experimental Farm at Brandon in 1906 was 53 bushels, 38 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
(For five years.)					(For five years.)				
		Bu. Lbs.	Days.	Bu. Lbs.			Bu. Lbs.	Days.	Bu. Lbs.
1	Invincible	65 42	109	52 24	10	Jarvis*	52 33	103	52 44
2	Standwell	63 30	108	52 24	11	Harvey*	50 7	102	48 32
3	Danish Chevalier	58 42	111	60 —	12	Logan*	49 15	103	48 12
4	Canadian Thorpe	55 42	106	48 16	13	Dunham*	44 15	102	39 8
5	Gordon*	55 19	102	52 24	(For less than 5 years.)				
6	Sidney*	55 9	100	54 8	Swedish Chevalier (2 years)				
7	Beaver*	54 41	109	40 20			53 26	106	47 24
8	Clifford*	53 4	102	52 24					
9	French Chevalier	52 46	111	41 12					

The average crop of the 14 varieties of two-rowed barley tested on the Experimental farm at Indian Head in 1906 was 49 bushels 2 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
(For five years.)					(For five years.)				
		Bu. Lbs.	Days.	Bu. Lbs.			Bu. Lbs.	Days.	Bu. Lbs.
1	Canadian Thorpe	51 18	119	32 44	10	Clifford*	46 6	107	46 32
2	Dunham*	51 15	111	41 32	11	Gordon*	45 18	109	34 36
3	Sidney*	49 40	100	41 2	12	Jarvis*	42 46	110	34 8
4	Standwell	49 28	112	40 —	13	Logan*	41 21	110	27 4
5	Beaver*	49 22	111	37 24	(For less than 5 years.)				
6	Invincible	49 22	110	36 32	Swedish Chevalier (2 years)				
7	French Chevalier	48 44	112	41 42			47 19	106	42 14
8	Harvey*	47 22	108	40 40					
9	Danish Chevalier	47 16	112	41 12					

The average crop of the 14 varieties of two-rowed barley tested on the Experimental Farm at Agassiz in 1906 was 38 bushels 23 lbs. per acre.

PEASE.

Twenty-four varieties of pease have been under trial at all the Experimental Farms during the past season. The plots were of the same size as those sown with spring wheat. The quantity of seed used per acre varied from 2 to 3 bushels, depending on the size of the pea. The dates of sowing were as follows: At Ottawa, Ont., May 7th; Nappan, N.S., May 22nd; Brandon, Man., April 30th; Indian Head, Sask., May 2nd, and at Agassiz, B.C., April 17th.

The yield is expressed in bushels per acre, the bushel of pease being 60 lbs.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years)	Bu. Lbs.	Days.	Bu. Lbs.
1	Golden Vine...	36	109	28 39	13	Early Britain.....	32 20	111	31 40
2	Mackay.....	16	110	27 30	14	Agnes.....	32 12	109	27 40
3	Prussian Blue.....	2	97	27 30	15	Pearl.....	32 8	108	29 40
4	Chancellor.....	8	94	34 30	16	Prince Albert.....	32 4	110	24 40
5	Prince.....	4	100	24 30	17	Kent.....	31 56	111	26 30
6	English Grey.....	52	101	31 20	18	Arthur.....	31 32	106	33 30
7	Victoria.....	14	101	23 40	19	Archer.....	31 20	112	29 40
8	Picton.....	28	100	27 40	20	Duke.....	31 16	110	28 20
9	White Wonder.....	28	100	19 30	21	Wisconsin Blue.....	30 16	109	26 40
10	Gregory.....	3	92	27 40	22	Black-eye Marrowfat.....	29 48	111	27 30
11	Daniel O'Rourke.....	32 46	109	27 40	23	Nelson.....	29 32	105	24 40
12	Paragon.....	32 40	106	24 40	24	White Marrowfat.....	28 32	109	21 40

The average crop of the 24 varieties of pease tested on the Central Experimental Farm at Ottawa, in 1906, was 27 bu. 3 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years)	Bu. Lbs.	Days.	Bu. Lbs.		(For five years)	Bu. Lbs.	Days.	Bu. Lbs.
1	Archer.....	20 12	113	18 40	13	Daniel O'Rourke.....	26 28	110	19 30
2	Prince Albert.....	30 30	112	29 30	14	Paragon.....	26 16	111	35 20
3	Agnes.....	30	112	16 40	15	Duke.....	25 56	112	23 30
4	Nelson.....	29 36	111	18 40	16	Golden Vine.....	25 52	110	22 30
5	Chancellor.....	29 24	105	18 30	17	Prince.....	25 52	113	30 30
6	White Marrowfat.....	29	111	24 30	18	Early Britain.....	25 12	109	28 30
7	Arthur.....	28 40	109	17 20	19	Picton.....	24 44	112	20 30
8	Gregory.....	28	114	26 30	20	Pearl.....	24 44	114	24 40
9	Victoria.....	26 18	117	28 40	21	Wisconsin Blue.....	24 24	112	22 40
10	English Grey.....	26 18	112	14 40	22	Kent.....	23 20	113	16 40
11	Mackay.....	26 40	113	19 20	23	Prussian Blue.....	23 30	110	19 30
12	Black-eye Marrowfat.....	26 40	113	20 30	24	White Wonder.....	20 30	108	15 20

The average crop of the 24 varieties of pease tested on the Experimental Farm at Nappan, in 1906, was 21 bu. 57 lbs. per acre.

PEASE—Continued.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average Yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Early Britain	53 33	125	45 20	13	Wisconsin Blue	45 46	125	46 20
2	Mackay	52	130	50	14	Paragon	45 34	125	50
3	Victoria	50 8	132	46 36	15	Black-eye Marrowfat	45 20	123	58 20
4	Arthur	49 36	123	48 20	16	Archer	45 10	133	44 30
5	Pictou	49 18	127	43 40	17	Daniel O'Rourke	44 22	130	44 20
6	Gregory	48 46	129	53	18	Prussian Blue	44 16	122	51
7	Pearl	48 2	135	45 10	19	Nelson	43 46	123	50
8	Golden Vine	47 42	124	44 50	20	Luke	43 44	128	53 20
9	Prince	47 24	132	53 40	21	Chancellor	43 24	117	51 40
10	English Grey	46 30	132	38	22	Kent	42 56	133	30
11	White Marrowfat	46 28	131	51 20	23	Prince Albert	42 44	133	41 40
12	White Wonder	46 26	120	51 40	24	Agnes	41 50	128	40

The average crop of the 24 varieties of pease tested on the Experimental Farm at Brandon in 1906 was 47 bushels, 42 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	Paragon	52 4	117	39	13	Gregory	46 30	117	34 40
2	Daniel O'Rourke	51 14	111	41	14	Kent	46 18	119	39
3	Early Britain	51 6	115	45 20	15	Agnes	46 6	115	30
4	Prussian Blue	50 22	115	41	16	Luke	45 34	119	41 20
5	Chancellor	50 6	114	36	17	Arthur	44 54	113	36
6	English Grey	49 34	115	37 40	18	Archer	44 34	118	34 40
7	Pictou	48 34	115	36 20	19	Pearl	44 26	116	36
8	Mackay	48 18	119	38	20	Nelson	44 6	115	38 40
9	Prince	48 10	115	33 20	21	Wisconsin Blue	43 50	119	36
10	Black-eye Marrowfat	47 54	118	36	22	Prince Albert	42 6	116	45 40
11	Golden Vine	47 10	114	45 40	23	White Marrowfat	40 38	117	36
12	White Wonder	47 2	112	3 40	24	Victoria	38 58	117	33 20

The average crop of the 24 varieties of pease tested on the Experimental Farm at Indian Head in 1906 was 38 bushels 1 lb. per acre.

II

PEASE—Continued.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Average days maturing.	Yield in 1906.
	(For five years).	Bu. Lbs.	Days.	Bu. Lbs.		(For five years).	Bu. Lbs.	Days.	Bu. Lbs.
1	White Marrowfat....	43 54	116	49 ..	13	Chancellor.....	36 39	117	34 40
2	Early Britain....	43 14	112	48 40	14	Nelson.....	38 26	115	36 ..
3	English Grey....	39 42	114	50 ..	15	Pictou.....	35 40	117	46 40
4	Mackay.....	38 42	116	43 ..	16	Gregory.....	35 34	114	36 20
5	Prince.....	38 42	117	38 40	17	Agnes.....	35 20	116	28 ..
6	White Wonder....	38 32	114	36 40	18	Daniel O'Rourke....	35 2	111	37 40
7	Golden Vine.....	38 18	116	42 40	19	Wisconsin Blue....	35 ..	116	28 ..
8	Arthur.....	38 10	114	38 10	20	Black-eye Marrowfat	34 30	116	28 ..
9	Victoria.....	37 56	118	45 20	21	Duke.....	33 58	121	29 40
10	Kent.....	37 8	116	48 20	22	Pearl.....	33 54	117	32 30
11	Paragon.....	37 8	121	27 20	23	Archer.....	33 48	117	29 ..
12	Prince Albert.....	36 53	116	41 20	24	Prussian Blue.....	33 28	114	25 20

The average crop of the 24 varieties of pease tested on the Experimental Farm at Agassiz in 1906 was 38 bushels 37 lbs. per acre.

INDIAN CORN.

The number of varieties of Indian corn tested in 1906 was twenty-three. These were sown in rows about three feet apart, and the plants thinned out to six or eight inches apart in the rows. The dates of sowing were as follows:—At Ottawa, Ont., May 28th; Nappan, N.S., June 8th; Brandon, Man., June 11th; Indian Head, Sask., May 19th, and at Agassiz, B.C., May 4th.

The crop in each case was cut green and put into the silo for the winter feeding of stock. The dates of cutting were:—At Ottawa, Ont., Sept. 11th; Nappan, N.S., Oct. 3rd; Brandon, Man., Aug. 27th; Indian Head, Sask., Sept. 13th, and at Agassiz, B.C., Oct. 2nd.

The yield per acre has been calculated in each case from the weight obtained from two rows each 66 feet long.

In Canada the ton is 2,000 lbs.

INDIAN CORN—Continued.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties Tested.	Average yield.	Yield in 1906.	Number.	Varieties Tested.	Average yield.	Yield in 1906.
	(For five years).	Tons Lbs.	Tons Lbs.		(For five years).	Tons Lbs.	Tons Lbs.
1	Eureka	24 620	11	15	Longfellow.....	19 82	13 310
2	Thoroughbred White Flint.....	22 1,276	12 1,740	16	North Dakota White.....	18 1,708	10 570
3	Superior Fodder.....	22 1,063	13 730	17	Champion White Pearl.....	18 1,543	10 1,450
4	Giant Prolific Ensilage.....	22 1,023	13 840	18	Cloud's Early Yellow.....	18 1,400	8 1,160
5	Early Butler.....	21 1,516	14 1,590	19	Evergreen Sugar.....	17 1,882	11 1,210
6	Red Cob Ensilage.....	21 1,274	13 1,949	20	Angel of Midnight.....	16 1,102	7 1,290
7	Early Mastodon.....	21 1,219	14 1,920				
8	Salzer's All Gold.....	21 1,032	8 1,600		(For less than 5 years).		
9	Pride of the North.....	20 1,162	7 1,290		Wood's Northern Dent (1 year).....		15 690
10	Mammoth Cuban.....	20 854	13 1,720		Early Leaming (1 year).....		13 950
11	Compton's Early.....	19 1,941	11 1,320		Early Longfellow (1 year).....		11
12	Selected Leaming.....	19 1,754	14 50				
13	King Philip.....	19 1,358	11 110				
14	White Cap Yellow Dent.....	19 676	7 190				

The average crop of the 23 varieties of Indian corn tested on the Central Experimental Farm at Ottawa in 1906 was 11 tons, 1,420 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Tons Lbs.	Tons Lbs.		(For five years).	Tons Lbs.	Tons Lbs.
1	Thoroughbred White Flint.....	22 858	25 160	15	King Philip.....	18 498	18 1,900
2	Eureka.....	22 594	23 1,850	16	Mammoth Cuban.....	17 1,410	18 800
3	Red Cob Ensilage.....	21 42	19 1,270	17	White Cap Yellow Dent.....	17 1,156	18 1,400
4	Salzer's All Gold.....	20 1,624	17 650	18	Cloud's Early Yellow.....	17 618	20 920
5	Giant Prolific Ensilage.....	20 1,580	20 1,800	19	North Dakota White.....	17 540	20 1,800
6	Early Mastodon.....	20 260	25 600	20	Champion White Pearl.....	17 474	21 20
7	Longfellow.....	19 1,772	19 1,600				
8	Superior Fodder.....	19 1,160	18 1,950		(For less than 5 years).		
9	Pride of the North.....	19 560	17 1,750		Early Leaming (1 year).....		22 550
10	Compton's Early.....	19 38	21 900		Early Longfellow (1 year).....		18 950
11	Angel of Midnight.....	18 1,988	24 1,500		Wood's Northern Dent (1 year).....		16 450
12	Evergreen Sugar.....	18 1,796	22 330				
13	Early Butler.....	18 1,510	19 170				
14	Selected Leaming.....	18 1,136	20 1,250				

The average crop of the 23 varieties of Indian corn tested on the Experimental Farm at Nappan in 1906 was 20 tons, 1,068 lbs. per acre.

INDIAN CORN—Continued.
EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Tons. Lbs.	Tons. Lbs.		(For five years).	Tons. Lbs.	Tons. Lbs.
1	Thoroughbred White Flint	21 425	21 1,296	15	Early Mastodon	17 637	18 168
2	Superior Fodder	20 1,237	19 1,600	16	Mammoth Cuban	16 578	15 624
3	Eureka	20 1,022	18 960	17	White Cap Yellow Dent	15 1,838	13 1,984
4	Longfellow	20 920	21 768	18	Cloud's Early Yellow	15 1,680	19 1,072
5	Champion White Pearl	19 1,811	21 1,560	19	Selected Leaming	15 888	14 1,304
6	Angel of Midnight	19 966	19 280	20	Evergreen Sugar	13 770	14 248
7	Compton's Early	19 755	19 808				
8	North Dakota White	18 1,762	19 16		(For less than 5 years).		
9	Early Butler	18 1,752	19 544		Early Longfellow (1 year)		18 168
10	Salzer's All Gold	18 1,541	18 960		Early Leaming (1 year)		16 472
11	King Philip	18 802	18 698		Wood's Northern Dent (1 year)		15 624
12	Red Cob Ensilage	18 749	18 432				
13	Pride of the North	17 1,482	17 848				
14	Giant Prolific Ensilage	17 1,376	16 1,000				

The average crop of the 23 varieties of Indian corn tested on the Experimental Farm at Brandon in 1906 was 18 tons, 19 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Tons. Lbs.	Tons. Lbs.		(For five years).	Tons. Lbs.	Tons. Lbs.
1	Angel of Midnight	16 604	15 800	14	White Cap Yellow Dent	12 891	11 550
2	Thor-bred White Flint	15 1,882	15 1,570	15	Early Butler	12 316	13 620
3	Eureka	15 975	16 1,000	16	Selected Leaming	11 1,272	14 710
4	Salzer's All Gold	15 580	11 1,650	17	Early Mastodon	11 1,135	14 1,920
5	Compton's Early	14 1,674	12 1,850	18	Mammoth Cuban	11 317	11
6	Pride of the North	14 486	15 1,020	19	Evergreen Sugar	11 312	14 50
7	North Dakota White	14 367	13 1,500	20	Cloud's Early Yellow	10 478	13 1,560
8	King Philip	14 50	12 1,630				
9	Champion White Pearl	13 1,177	15 800		(For less than 5 years)		
10	Giant Prolific Ensilage	13 334	14 1,700		Early Longfellow (1 yr)		14 50
11	Longfellow	13 193	14 160		Early Leaming (1 yr.)		11 1,870
12	Red Cob Ensilage	12 1,766	14 1,150		Wood's Northern Dent (1 yr.)		10 1,340
13	Superior Fodder	12 1,538	11				

The average crop of the 23 varieties of Indian corn tested on the Experimental Farm at Indian Head, in 1906 was 13 tons 1,280 lbs. per acre.

INDIAN CORN—Continued.
EXPERIMENTAL FARM AT AGASSIZ, B. C.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Thoroughbred White Flint	23	1,630	18	1,620	14	North Dakota White	16	1,132	16	560
2	Pride of the North	23	1,232	24	1,280	15	Eureka	16	76	13	620
3	Red Cob Ensilage	21	1,120	20	1,580	16	King Philip	15	1,988	14	1,260
4	Superior Fodder	21	88	19	1,490	17	Cloud's Early Yellow	15	18	12	90
5	Giant Prolific Ensilage	20	1,492	20	40	18	Longfellow	14	1,854	13	1,240
6	Mammoth Cuban	20	260	17	1,530	19	Selected Leaming	13	1,852	11	220
7	Salzer's All Gold	20	242	18	1,310	20	Evergreen Sugar	12	1,678	11	1,760
8	Compton's Early	19	801	17	1,805		(For less than 5 years).				
9	Early Butler	18	1,664	17	980		Wood's Northern Dent (1 yr.)			16	1,600
10	Champion White Pearl	18	740	17	1,860		Early Longfellow (1 yr.)			12	310
11	Early Mastodon	17	1,110	14	700		Early Leaming (1 yr.)			11	1,430
12	Angel of Midnight	17	122	14	1,040						
13	White Cap Yellow Dent	17	34	19	280						

The average crop of the 23 varieties of Indian corn tested on the Experimental Farm at Agassiz in 1906 was 16 tons 632 lbs. per acre.

TURNIPS.

Twenty varieties were tested in 1906, sown in drills, or on the flat, 2½ feet apart. The dates of sowing were as follows:—Ottawa, Ont. May 15th; Nappan, N.S., June 16th; Brandon, Man., May 22nd; Indian Head, Sask., June 14th* and at Agassiz, May 7th.

The dates of pulling were as follows:—Ottawa, October 24th; Nappan, October 24th; Brandon, October 11th; Indian Head, October 10th and at Agassiz November 1st.

The yield per acre in each instance has been calculated from the weight of roots gathered from two rows each 66 feet long. This applies to all the field roots.

In Canada the ton is 2,000 lbs.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Jumbo	36	637	16	150	11	Imperial Swede	31	571	17	500
2	New Century	36	340	22	300	12	Halewood's Bronze Top	31	351	15	1,150
3	Kangaroo	35	1,052	15	1,700	13	Hall's Westbury	30	1,887	16	1,650
4	Mammoth Clyde	35	281	19	600	14	Selected Purple Top	30	382	19	300
5	Good Luck	34	1,095	13	1,560	15	East Lothian	29	987	11	...
6	Emperor Swede	33	618	12	1,950	16	Drummond Purple Top	29	886	10	1,550
7	Magnum Bonum	33	157	15	850	17	Skirvings	29	170	18	800
8	Perfection Swede	32	870	21	300	18	Carter's Elephant	28	1,391	14	100
9	Hartley's Bronze	31	837	15	1,500	19	Sutton's Champion	27	1,485	17	1,000
10	Elephant's Master	31	620	14	50	20	Bangholm Selected	27	1,018	11	1,800

The average yield of the 20 varieties of turnips tested on the Central Experimental Farm at Ottawa in 1906 was 15 tons 1,890 lbs. per acre.

*At Indian Head the first two sowings of May 11th and 19th were destroyed by cut worms, the crops recorded were grown from a third sowing made on June 13th.

TURNIPS—Continued.
EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Perfection Swede.....	40	1,920	26	800	11	Jumbo.....	37	986	80	...
2	Magnum Bonum.....	40	680	24	1,600	12	Hall's Westbury.....	37	962	28	1,440
3	Kangaroo.....	38	1,022	28	1,840	13	Carter's Elephant.....	37	549	22	...
4	Selected Purple Top..	38	1,127	26	1,600	14	Sutton's Champion.....	36	1,654	87	400
5	Good Luck.....	38	1,022	23	1,680	15	Mammoth Clyde.....	35	1,482	24	1,280
6	Hartley's Bronze.....	38	1,016	37	240	16	Imperial Swede.....	36	612	28	1,600
7	Drummond Purple Top..	38	369	26	100	17	Bangholm Selected.....	35	1,988	21	400
8	Elephant's Master....	37	1,503	23	1,040	18	New Century.....	35	1,605	30	160
9	Halewood's Bronze Top	37	1,286	26	320	19	Skirvings.....	35	1,006	21	1,200
10	Emperor Swede.....	37	1,196	23	560	20	East Lothian.....	34	189	20	1,920

The average yield of the 20 varieties of turnips tested on the Experimental Farm at Nappan in 1906 was 25 tons 612 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years.)						(For five years.)				
1	Hartley's Bronze.....	31	787	26	1,856	11	New Century.....	26	483	19	16
2	Good Luck.....	30	1,670	25	952	12	Imperial Swede.....	26	878	22	880
3	Magnum Bonum.....	29	819	23	1,784	13	Elephant's Master....	26	378	20	1,448
4	Bangholm Selected.....	28	1,299	25	424	14	Drummond Purple Top..	25	1,797	18	1,488
5	Sutton's Champion.....	28	549	26	1,592	15	Emperor Swede.....	25	1,533	22	88
6	Hall's Westbury.....	27	1,452	25	1,744	16	Halewood's Bronze Top	25	1,163	19	544
7	Jumbo.....	27	648	24	576	17	Mammoth Clyde.....	25	956	21	1,560
8	Skirvings.....	27	437	18	696	18	Kangaroo.....	25	952	21	1,032
9	Carter's Elephant.....	26	1,962	24	48	19	East Lothian.....	25	688	20	392
10	Perfection Swede.....	26	1,539	20	1,976	20	Selected Purple Top..	25	582	20	1,184

The average yield of the 20 varieties of turnips tested on the Experimental Farm at Brandon in 1906 was 22 tons 814 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Sutton's Champion.....	24	1,038	15	228	11	Emperor Swede.....	21	198	14	1,172
2	Hall's Westbury.....	23	1,154	20	1,052	12	Jumbo.....	20	1,667	13	1,588
3	Perfection Swede.....	23	954	21	900	13	Magnum Bonum.....	20	1,594	19	1,864
4	Halewood's Bronze Top	23	728	16	208	14	Drummond Purple Top..	20	919	13	1,984
5	Hartley's Bronze.....	22	1,961	22	1,408	15	Mammoth Clyde.....	20	52	17	320
6	Skirvings.....	22	426	16	208	16	New Century.....	20	42	15	1,944
7	Bangholm Selected.....	21	1,975	21	636	17	Selected Purple Top..	19	892	15	756
8	Carter's Elephant.....	21	521	16	1,660	18	Kangaroo.....	18	726	16	472
9	Good Luck.....	21	663	16	1,396	19	Elephant's Master....	18	647	16	1,924
10	Imperial Swede.....	21	638	16	1,924	20	East Lothian.....	18	445	15	1,020

The average yield of the 20 varieties of turnips tested on the Experimental Farm at Indian Head in 1906 was 17 tons 333 lbs. per acre.

TURNIPS—Continued.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Carter's Elephant.....	28	1,664	15	1,680	11	Hall's Westbury.....	25	1,480	18	928
2	Perfection Swede.....	28	996	20	1,760	12	Imperial Swede.....	25	1,025	18	432
3	Halewood's Bronze Top	27	1,683	21	240	13	Bangholm Selected...	25	908	14	488
4	Mammoth Clyde.....	27	556	10	1,120	14	Kangaroo.....	25	530	21	1,032
5	Elephant's Master.....	26	1,820	16	208	15	Magnum Bonum.....	25	61	17	1,376
6	East Lothian.....	26	1,311	14	1,172	16	Skirvings.....	24	1,762	13	664
7	Good Luck.....	26	793	23	200	17	Drummond Purple Top	23	1,673	15	1,152
8	Hartley's Bronze.....	26	536	12	552	18	New Century.....	23	840	16	142
9	Jumbo.....	25	1,875	21	600	19	Selected Purple Top	22	1,223	11	1,760
10	Emperor Swede.....	25	1,750	18	960	20	Sutton's Champion...	21	1,243	15	1,944

The average yield of the 20 varieties of turnips tested on the Experimental Farm at Agassiz in 1906 was 16 tons 1,220 lbs. per acre.

MANGELS

Sixteen varieties of mangels have been under test during 1906. All were sown in drills or on the flat in rows 2½ feet apart. The dates of sowing were as follows:—At Ottawa, Ont., May 15th; Nappan, N.S., June 14th; Brandon, Man., May 23rd; Indian Head, Sask., June 13th*, and at Agassiz, B.C., April 21.

The dates of pulling were as follows:—At Ottawa, Ont., Oct. 24th; Nappan, N.S., Oct. 17th; Brandon, Man., Oct. 8th; Indian Head, Sask., Oct. 8th, and at Agassiz Oct. 30th.

In Canada the ton is 2,000 lbs.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years).						(For five years).				
1	Mammoth Long Red...	41	8		800	8	Yellow Intermediate.	36	879	37	1,050
2	Mammoth Yellow Intermediate.....	35	1,68		800	9	Selected Yellow Globe	35	56	34	900
3	Prize Mammoth Long Red.....	38	1,853		600	10	Giant Sugar Mangel	34	991	30	1,600
4	Half Sugar White.....	37	1,527	25	700	11	Selected Mammoth Long Red.....	33	954	40	1,550
5	Triumph Yellow Globe	37	1,476	36	700	12	Leviathan Long Red.	33	648	28	400
6	Prize Winner Yellow Globe.....	37	1,087	33	200	13	Giant Yellow Intermediate.....	32	1,060	29	1,250
7	Lion Yellow Intermediate.....	36	1,146	32	300	14	Gate Post.....	32	424	24	1,500
						15	Half Sugar Row.....	31	118	27	700
						16	Giant Yellow Globe..	30	1,122	21	50

The average yield of the 16 varieties of mangels tested on the Central Experimental Farm at Ottawa in 1906 was 31 tons 1,569 lbs. per acre.

*At Indian Head the first two sowings of May 11th and 19th were destroyed by cut worms. The crops recorded were grown from a third sowing made on June 13th.

MANGELS—Continued.

EXPERIMENTAL FARM, NAPPAN, N. S.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Mammoth Yellow Intermediate.....	35 1,142	17 1,145	8	Prize Mamm. Long Red.	30 999	16 1,495
2	Lion Yellow Intermediate.....	33 763	16 670	9	Giant Yellow Globe.	29 1,531	13 730
3	Yellow Intermediate.....	33 1,477	19 940	10	Mammoth Long Red.....	29 192	18 465
4	Giant Yellow Intermediate.....	33 910	13 235	11	Half Sugar Rosy.....	28 1,959	14 1,205
5	Prize Winner Yellow Globe.....	33 269	16 1,000	12	Selected Mamm. Long Red.....	28 819	13 1720
6	Selected Yellow Globe.....	32 72	15 960	13	Triumph Yellow Globe..	28 53	14 1700
7	Half Sugar White.....	31 1,261	19 280	14	Leviathan Long Red....	27 1,843	15 865
				15	Giant Sugar Mangel....	27 9	13 565
				16	Gate Post.....	26 1,971	13 1,555

The average yield of the 16 varieties of mangels tested on the Experimental Farm at Nappan in 1906 was 15 tons, 1,907 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Mammoth Long Red....	30 826	27 384	9	Gate Post.....	27 806	26 1,064
2	Triumph Yellow Globe..	29 1,294	38 296	10	Lion Yellow Intermediate.....	26 1,486	21 636
3	Prize Mamm. Long Red.	29 872	32 1,472	11	Selected Yellow Globe..	26 1,341	32 416
4	Half Sugar White.....	29 502	31 304	12	Half Sugar Rosy.....	26 1,354	28 1,288
5	Selected Mamm. Long Red.....	29 398	29 1,400	13	Leviathan Long Red....	25 182	26 272
6	Prize Winner Yellow Globe.....	29 368	33 264	14	Giant Yellow Intermediate.....	24 1,711	25 1,744
7	Yellow Intermediate....	29 238	31 1,624	15	Giant Sugar Mangel....	24 946	26 1,856
8	Mammoth Yellow Intermediate.....	28 1,024	26 1,856	16	Giant Yellow Globe....	23 306	24 312

The average yield of the 16 varieties of mangels tested on the Experimental Farm at Brandon in 1906 was 28 tons, 1,824 lbs. per acre.

MANGELS—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Prize Winner Yellow Globe	26 1,120	27 253	8	Giant Yellow Globe	23 617	24 180
2	Triumph Yellow Globe	25 1,652	28 232	9	Half Sugar Rosy	21 1,603	21 1,296
3	Giant Yellow Intermediate	25 942	24 972	10	Giant Sugar Mangel	21 1,222	20 1,845
4	Lion Yellow Intermediate	25 875	21 636	11	Prize Mamm. Long Red	21 917	19 544
5	Selected Yellow Globe	24 1,037	22 1,804	12	Mammoth Long Red	21 633	21 900
6	Half Sugar White	24 850	23 506	13	Selected Mammoth Long Red	21 552	19 1,336
7	Yellow Intermediate	23 1,516	23 728	14	Leviathan Long Red	20 1,751	21 636
				15	Gate Post	20 1,162	18 1,092

Fifteen varieties only were sown at Indian Head, the Mammoth Yellow Intermediate being accidentally omitted.

The average yield of the 15 varieties of mangels tested on the Experimental Farm at Indian Head in 1906 was 22 tons, 1,003 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Mammoth Long Red	31 1,235	14 644	9	Selected Mamm. Long Red	25 1,612	14 1,040
2	Lion Yellow Intermediate	28 1,332	15 1,680	10	Mammoth Yellow Intermediate	25 721	20 1,712
3	Yellow Intermediate	28 1,263	27 852	11	Half Sugar Rosy	25 606	18 168
4	Giant Sugar Mangel	28 397	18 960	12	Prize Mamm. Long Red	24 1,102	11 1,892
5	Half Sugar White	28 239	16 868	13	Triumph Yellow Globe	23 1,422	20 1,184
6	Giant Yellow Globe	27 1,361	11 1,760	14	Gate Post	23 840	10 856
7	Selected Yellow Globe	26 510	11 1,826	15	Leviathan Long Red	22 1,724	19 544
8	Giant Yellow Intermediate	26 371	13 1,720	16	Prize Winner Yellow Globe	22 1,593	11 176

The average yield of the 16 varieties of mangels tested on the Experimental Farm at Agassiz in 1906 was 16 tons, 118 lbs. per acre.

CARROTS.

Ten different sorts of carrots were tested during 1906, all being sown in drills, on the flat, in rows two feet apart. The dates of sowing were as follows:—At Ottawa, Ont., May 15th; Nappan, N.S., June 4th; Brandon, Man., May 8th; Indian Head, Sask., June 13th; and at Agassiz, B.C., April 21st.

The dates of pulling were as follows:—At Ottawa, Oct. 25th; Nappan, Oct. 20th; Brandon, Oct. 10th; Indian Head, Oct. 9th; and at Agassiz, Oct. 31st.

In Canada the ton is 2,000 lbs.

CARROTS—Continued.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years.)						(For five years.)				
1	Mammoth White Intermediate.....	29	1,227	23	1,060	6	Carter's Orange Giant.	24	697	16	1,000
2	New White Intermediate.....	23	57	20	900	7	Long Yellow Stump-rooted.....	23	616	20	1,300
3	Improved Short White	27	1,973	23	1,200	8	White Belgian.....	21	481	15	1,200
4	Giant White Vosges..	27	1,581	21	900	9	Half Long Chantenay.	20	91	14	1,200
5	Ontario Champion....	27	188	21	1,000	10	Early Gem.....	19	601	15	800

The average yield of the 10 varieties of carrots tested on the Central Experimental Farm at Ottawa in 1906 was 19 tons 1,605 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years.)						(For five years.)				
1	Ontario Champion....	19	1,611	12	420	6	Long Yellow Stump-rooted.....	17	1,738	10	625
2	New White Intermediate.....	19	1,511	15	1,515	7	Improved Short White	17	919	9	150
3	Mammoth White Intermediate.....	19	960	8	665	8	Half Long Chantenay.	17	73	10	995
4	Giant White Vosges..	19	824	10	460	9	Carter's Orange Giant.	16	957	10	130
5	White Belgian.....	18	199	13	70	10	Early Gem.....	15	1,453	9	1,305

The average yield of the 10 varieties of carrots tested on the Experimental Farm at Nappan in 1906 was 10 tons 1,833 lbs. per acre.

EXPERIMENTAL FARM, BRANDON, MAN.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Tons.	Lbs.	Tons.	Lbs.			Tons.	Lbs.	Tons.	Lbs.
	(For five years.)						(For five years.)				
1	New White Intermediate.....	24	576	18	960	7	Mammoth White Intermediate.....	19	412	18	80
2	Ontario Champion....	23	816	19	720	8	Long Yellow Stump-rooted.....	19	236	20	480
3	Improved Short White	23	24	19	1,160	9	Half Long Chantenay.	17	1,792	18	1,400
4	Giant White Vosges..	20	1,448	20	1,360	10	Early Gem.....	17	1,288	20	40
5	Carter's Orange Giant.	20	832	21	1,120						
6	White Belgian.....	19	632	14	160						

The average yield of the 10 varieties of carrots tested on the Experimental Farm at Brandon in 1906 was 19 tons 148 lbs. per acre.

CARROTS—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.		Number.	Varieties tested.	Average yield.	
		Tons.	Lbs.			Tons.	Lbs.
(For five years ending 1905.)				(For five years ending 1905.)			
1	Ontario Champion.....	16	113	6	Early Gem.....	13	47
2	New White Intermediate.....	16	1,562	7	Half Long Chantenay.....	12	1,730
3	Giant White Vonges.....	14	1,464	8	Mammoth White Intermediate.....	12	1,684
4	Improved Short White.....	14	402	9	Carter's Orange Giant.....	12	749
5	White Belgian.....	13	426	10	Long Yellow Stump-rooted... ..	12	274

The plots of carrots at Indian Head in 1906 were entirely destroyed by cut-worms. Under these circumstances it is thought best to give the yields for the five years ending 1905.

EXPERIMENTAL FARM, AGASSIZ, B. C.

Number.	Varieties tested.	Average yield.		Yield in 1906.	Number.	Varieties tested.	Average yield.		Yield in 1906.
	(For five years.)	Tons.	Lbs.	Tons.	Lbs.		(For five years.)	Tons.	Lbs.
1	Giant White Vooges...	31	456	37	1,340	6	New White Intermed- iate.....	24	1,309
2	Mamm. White Inter- mediate.....	28	678	26	1,592	7	Ontario Champion....	24	554
3	Improved Short White	27	105	31	964	8	Early Gem.....	20	1,796
4	White Belgian.....	26	331	28	232	9	Long Yellow Stump Rooted.....	20	814
5	Carter's Orange Giant	25	1,097	31	1,756	10	Half Long Chantenay.	19	1,684
								26	404

The average yield of the 10 varieties of carrots tested on the Experimental Farm at Agassiz in 1906 was 28 tons 427 lbs. per acre.

SUGAR BEETS.

Eight varieties of sugar beets have been tested during 1906, sown in drills or on the flat in rows two feet apart. The dates of sowing were: At Ottawa, Ont., May 15th; Nappan, N.S., June 14th; Brandon, Man., May 23rd; Indian Head, Sask., June 13th and at Agassiz, B.C., April 21st.

The dates of pulling were as follows: At Ottawa Oct. 25th; Nappan, October 19th; Brandon, October 8th; Indian Head, October 9th and at Agassiz, October 30th.

The yield per acre in each instance has been calculated from the weight of roots gathered from two rows each 66 feet long. Though all the varieties included in these tests are commonly classed as sugar beets it should be noted that the only sorts recommended for use in the manufacture of beet sugar are Wanzleben, Vilmorin's Improved and French Very Rich.

In Canada the ton is 2,000 lbs.

SUGAR BEETS—Continued.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Danish Red Top.....	34 1,919	35 50	5	Royal Giant.....	30 624	31 1,330
2	Red Top Sugar.....	34 1,611	33 350	6	Wanzleben.....	26 853	26 1,700
3	Danish Improved.....	33 1,392	31 1,950	7	French Very Rich.....	24 649	28 300
4	Improved Imperial.....	32 452	34 150	8	Vilmorin's Improved.....	23 1,387	25 800

The average yield of the 8 varieties of sugar beets tested on the Central Experimental Farm at Ottawa in 1906 was 30 tons 1,581 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N. S.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Royal Giant.....	27 991	10 295	5	Improved Imperial.....	23 790	12 1,410
2	Red Top Sugar.....	24 1,796	9 975	6	Wanzleben.....	20 246	8 830
3	Danish Red Top.....	24 1,218	11 1,430	7	Vilmorin's Improved.....	18 1,180	8 1,490
4	Danish Improved.....	23 1,269	13 1,225	8	French Very Rich.....	16 1,641	11 605

The average yield of the 8 varieties of sugar beets tested on the Experimental Farm at Nappan in 1906 was 10 tons 1,532 lbs. per acre.

EXPERIMENTAL FARM BRANDON, MAN.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years.)	Tons. Lbs.	Tons. Lbs.		(For five years.)	Tons. Lbs.	Tons. Lbs.
1	Red Top Sugar.....	26 1,856	20 1,448	5	Improved Imperial.....	21 187	21 1,824
2	Danish Red Top.....	25 1,770	26 860	6	Wanzleben.....	19 1,706	16 1,792
3	Royal Giant.....	21 1,982	22 1,672	7	French Very Rich.....	16 525	16 1,264
4	Danish Improved.....	21 926	20 920	8	Vilmorin's Improved.....	15 571	15 624

The average yield of the 8 varieties of sugar beets tested on the Experimental Farm at Brandon in 1906 was 20 tons, 293 lbs. per acre.

SUGAR BEETS—Continued.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

CROPPED PHASE, INDIAN HEAD, SASK.											
Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.				
(For five years).				(For five years).							
		Tons. Lbs.	Tons. Lbs.			Tons. Lbs.	Tons. Lbs.				
1	Royal Giant	20	7	19	148						
2	Red Top Sugar	18	71	14	1,568	5	Danish Red Top	15	1,420	16	1,000
3	Danish Improved	16	1,072	16	472	6	Vilmorin's Improved	13	1,172	10	856
4	Improved Imperial	16	1,472	15	888	7	Wanzleben	13	180	11	308
						8	French Very Rich	12	1,537	9	480

The average yield of the 8 varieties of sugar beets tested on the Experimental Farm at Indian Head in 1906 was 14 tons, 215 lbs. per acre.

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Tons. Lbs.	Tons. Lbs.		(For five years).	Tons. Lbs.	Tons. Lbs.
1	Royal Giant	23 1,197	15 1,680	5	Danish Red Top	20 1,686	21 1,032
2	Improved Imperial	21 1,930	22 1,540	6	French Very Rich	17 1,533	12 1,080
3	Danish Improved	21 1,280	19 1,072	7	Wanzleben	17 637	18 1,356
4	Red Top Sugar	21 709	20 1,712	8	Vilmorin's Improved	17 185	10 64

The average yield of the 8 varieties of sugar beets tested on the Experimental Farm at Agassiz in 1906 was 17 tons, 1,442 lbs. per acre.

POTATOES.

Thirty-two varieties of potatoes have been under test during 1906. The potatoes were cut into pieces with two or three eyes in each, and these pieces were planted in rows $2\frac{1}{2}$ feet apart, the sets being placed a foot apart in the rows. The dates of planting and digging were as follows:—At Ottawa, Ont., planted May 22, dug Oct. 1st; at Nappan, N.S., planted June 13, dug October 12; at Brandon, Man., planted May 21, dug October 2; at Indian Head, Sask., planted May 12, dug October 3, and at Agassiz, B.C., planted May 1, dug September 17.

In Canada the bushel of potatoes is 60 lbs.

POTATOES—Continued.

CENTRAL EXPERIMENTAL FARM, OTTAWA, ONT.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Bus. Lbs.	Bus. Lbs.		(For five years).	Bus. Lbs.	Bus. Lbs.
1	Carman No. 1.....	387 38	114 24	18	Empire State.....	297 ..	132 ..
2	Late Puritan.....	375 19	116 36	19	Maule's Thoroughbred	294 48	105 36
3	Money Maker.....	362 7	74 48	20	American Wonder.....	286 53	79 12
4	Dreer's Standard.....	357 17	121 ..	21	Early Rose.....	283 48	149 36
5	Burnaby Mammoth.....	350 41	94 36	22	Carman No. 3.....	270 36	88 ..
6	Sabean's Elephant.....	349 22	129 48	23	Early White Prize.....	210 19	156 12
7	Canadian Beauty.....	348 55	112 12	24	Boves.....	209 26	112 12
8	I. X. L.....	346 43	112 12	(For less than 5 years).			
9	Holborn Abundance.....	333 31	171 36		Pearce (4 yrs.).....	310 45	143 ..
10	Irish Cobbler.....	330 53	132 ..		Early Envoy (4 yrs.).....	190 51	70 24
11	Rochester Rose.....	330 53	149 36		Pingree (4 yrs.).....	182 36	134 12
12	Reeve's Rose.....	326 29	114 24		Dooley (2 yrs.).....	253 ..	149 36
13	Country Gentleman.....	326 2	165 ..		Morgan Seedling (2 yrs.).....	247 30	121 ..
14	Vick's Extra Early.....	318 7	134 12		Vermont Gold Coin (2 yrs.).....	245 6	138 36
15	Uncle Sam.....	317 14	116 36		Dalmeny Beauty (1 yr.).....	.. ..	213 24
16	State of Maine.....	315 29	182 ..		Ashleaf Kidney (1 yr.).....	.. ..	151 48
17	Everett.....	310 12	88 ..				

The average crop of the 32 varieties of potatoes tested on the Central Experimental Farm at Ottawa in 1906 was 125 bushels 45 lbs. per acre.

EXPERIMENTAL FARM, NAPPAN, N.S.

Number.	Varieties tested.	Average yield.	Yield in 1906.	Number.	Varieties tested.	Average yield.	Yield in 1906.
	(For five years).	Bus. Lbs.	Bus. Lbs.		(For five years).	Bus. Lbs.	Bus. Lbs.
1	Vick's Extra Early.....	455 50	385 ..	18	Boves.....	323 24	297 ..
2	Rochester Rose.....	406 ..	358 36	19	American Wonder.....	319 ..	323 24
3	Irish Cobbler.....	371 16	367 24	20	Country Gentleman.....	318 7	350 ..
4	State of Maine.....	369 36	422 24	21	Maule's Thoroughbred	317 41	242 ..
5	I. X. L.....	368 43	321 12	22	Dreer's Standard.....	306 22	266 10
6	Everett.....	367 ..	286 ..	23	Early Rose.....	282 29	336 36
7	Carman No. 1.....	365 12	396 ..	24	Reeve's Rose.....	276 19	248 36
8	Late Puritan.....	361 41	341 ..	(For less than 5 years).			
9	Canadian Beauty.....	359 55	336 36		1 (4 yrs.).....	431 12	356 24
10	Empire State.....	355 5	343 12		Early Envoy (4 yrs.).....	343 12	380 36
11	Money Maker.....	354 24	356 24		Pingree (4 yrs.).....	331 31	297 ..
12	Holborn Abundance.....	354 12	281 36		Vermont Gold Coin (2 yrs.).....	508 12	503 48
13	Burnaby Mammoth.....	352 53	334 24		Dooley (2 yrs.).....	416 54	420 12
14	Carman No. 3.....	340 7	418 ..		Morgan Seedling (2 yrs.).....	390 30	297 ..
15	Early White Prize.....	339 41	330 ..		Ashleaf Kidney (1 yr.).....	.. ..	387 12
16	Uncle Sam.....	335 17	369 36		Dalmeny Beauty (1 yr.).....	.. ..	281 36
17	Sabean's Elephant.....	323 50	426 48				

The average crop of the 32 varieties of potatoes tested on the Experimental Farm at Nappan in 1906 was 345 bushels 3 lbs. per acre.

POTATOES—Continued.
EXPERIMENTAL FARM, BRANDON, MAN.

BRANDON, BRANDON					
---	--	--	--	--	--

The average crop of the 32 varieties of potatoes tested on the Experimental Farm at Brandon in 1906 was 389 bushels 14 lbs. per acre.

EXPERIMENTAL FARM, INDIAN HEAD, SASK.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
(For five years.)						(For five years.)					
		Bus.	Lbs.	Bus.	Lbs.			Bus.	Lbs.	Bus.	Lbs.
1	Country Gentleman.....	408	26	387	12	19	I. X. L.....	357	34	334	24
2	Uncle Sam.....	403	36	299	12	20	Canadian Beauty.....	356	5	380	36
3	Late Puritan.....	403	15	360	48	21	Irish Cobbler.....	341	35	332	12
4	Burnaby Mammoth.....	394	27	345	24	22	Early White Prize.....	327	16	305	48
5	Carman No. 1.....	394	25	228	48	23	Early Rose.....	319	49	294	48
6	Rochester Rose.....	391	6	332	12	24	Bovee.....	289	57	259	36
7	Carman No. 3.....	391	45	402	36	(For less than 5 years.)					
8	Sabean's Elephant.....	391	22	367	24	Early Envoy (4 yrs.).....		369	58	321	12
9	American Wonder.....	389	31	332	12	Pearce (4 yrs.).....		349	4	316	48
10	Reeve's Rose.....	388	44	321	12	Pingree (4 yrs.).....		319	55	224	24
11	Money Maker.....	385	18	433	24	Vermont Gold Corn (2 yrs.).....		493	6	360	48
12	Dreer's Standard.....	381	46	358	36	Morgan Seedling (2 yrs.).....		388	36	290	24
13	Maule's Thoroughbred.....	379	13	323	24	Dooley (2 yrs.).....		316	..	277	12
14	State of Maine.....	377	38	352	..	Dalmeny Beauty (1 yr.).....		..	..	406	50
15	Vick's Extra Early.....	377	12	369	30	Ashleaf Kidney (1 yr.).....		..	..	371	20
16	Empire State.....	374	23	347	36						
17	Holborn Abundance.....	368	40	292	36						
18	Everett.....	362	35	308	..						

The average crop of the 32 varieties of potatoes tested on the Experimental Farm at Indian Head in 1906 was 322 bushels 27 lbs. per acre.

POTATOES—*Concluded.*

EXPERIMENTAL FARM, AGASSIZ, B.C.

Number.	Varieties tested.	Average yield.		Yield in 1906.		Number.	Varieties tested.	Average yield.		Yield in 1906.	
		Bush.	Lbs.	Bush.	Lbs.			Bush.	Lbs.	Bush.	Lbs.
	(For five years.)						(For five years.)				
1	Late Puritan.....	460	14	611	36	20	Vick's Extra Early....	327	8	231	8
2	American Wonder....	444	41	508	12	21	Early White Prize....	319	40	330	..
3	Uncle Sam.....	426	8	300	48	22	Carman No. 3.....	309	6	330	..
4	Deer's Standard.....	410	13	589	36	23	Money Maker.....	293	22	211	12
5	Rochester Rose.....	406	59	432	..	24	Canadian Beauty.....	282	49	171	36
6	Country Gentleman....	405	1	272	48		(For less than 5 years.)				
7	State of Maine.....	400	11	466	24		Pearce (4 years).....	333	4	297	..
8	Carman No. 1.....	398	55	404	48		Early Envoy (4 years)...	220	55	218	54
9	Empire State.....	392	29	356	24		Pingree (4 years).....	201	40	200	12
10	Sabean's Elephant.....	390	34	435	36		Vermont Gold Coin (2 years).....	539	..	514	48
11	I. X. I.....	381	11	396	..		Dooley (2 years).....	462	..	268	24
12	Reeve's Rose.....	375	6	218	56		Morgan Seedling (2 years).....	414	42	363	..
13	Holborn Abundance....	367	11	336	36		Ashleaf Kidney (1 year) ..	..	..	495	..
14	Maule's Thoroughbred ..	365	5	402	36		Dalmeny Beauty (1 year) ..	..	..	277	12
15	Everett.....	342	3	453	12						
16	Irish Cobbler.....	339	1	248	36						
17	Early Rose.....	338	15	254	..						
18	Bovee.....	337	40	264	..						
19	Burnaby Mammoth....	329	32	323	24						

The average crop of the 32 varieties of potatoes tested on the Experimental Farm at Agassiz in 1906 was 353 bush. 53 lbs. per acre.

SUMMARY

The results obtained from the uniform trial plots shown in this bulletin show that there are marked differences in the relative productiveness of varieties even when grown side by side under similar conditions. The results of the average crops obtained for five years indicate also that the tendency to productiveness is in many instances persistent, manifesting itself under varying conditions of soil and climate to a remarkable degree. The establishment of such facts points to the importance of farmers choosing for seed those varieties which give the heaviest crop so that farming in Canada may thus be made more profitable.

During the past year the number of varieties under test has been further reduced by dropping some of those which have failed to come up to the high standard required. This reduction in the number tested will serve to give greater prominence to those varieties of the highest excellence.